



Figure 1:

Nucleotide sequence (SEQ ID NO: 17) and corresponding amino acid sequence (SEQ ID NO: 18) of the *Archaeoglobus fulgidus* exonuclease III gene:

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|---|-----|
| atg ctc aaa atc gcc acc ttc aac gta aac tcc atc agg agc aga ctg | 48 |
| Met Leu Lys Ile Ala Thr Phe Asn Val Asn Ser Ile Arg Ser Arg Leu | |
| 1 5 10 15 | |
| cac atc gtg att ccg tgg ctg aag gag aac aag cct gac att cta tgc | 96 |
| His Ile Val Ile Pro Trp Leu Lys Glu Asn Lys Pro Asp Ile Leu Cys | |
| 20 25 30 | |
| atg cag gag acg aag gtt gag aac agg aag ttt cct gag gcc gat ttt | 144 |
| Met Gln Glu Thr Lys Val Glu Asn Arg Lys Phe Pro Glu Ala Asp Phe | |
| 35 40 45 | |
| cac cgc atc ggc tac cac gtc gtc ttc agc ggg agc aag gga agg aat | 192 |
| His Arg Ile Gly Tyr His Val Val Phe Ser Gly Ser Lys Gly Arg Asn | |
| 50 55 60 | |
| gga gtg gcc ata gct tcc ctc gaa gag cct gag gat gtc agc ttc ggt | 240 |
| Gly Val Ala Ile Ala Ser Leu Glu Glu Pro Glu Asp Val Ser Phe Gly | |
| 65 70 75 80 | |
| ctc gat tca gag ccg aag gac gag gac agg ctg ata agg gca aag ata | 288 |
| Leu Asp Ser Glu Pro Lys Asp Glu Asp Arg Leu Ile Arg Ala Lys Ile | |
| 85 90 95 | |
| gct ggc ata gac gtg att aac acc tac gtt cct cag gga ttc aaa att | 336 |
| Ala Gly Ile Asp Val Ile Asn Thr Tyr Val Pro Gln Gly Phe Lys Ile | |
| 100 105 110 | |
| gac agc gag aag tac cag tac aag ctc cag tgg ctt gag agg ctt tac | 384 |
| Asp Ser Glu Lys Tyr Gln Tyr Lys Leu Gln Trp Leu Glu Arg Leu Tyr | |
| 115 120 125 | |
| cat tac ctt caa aaa acc gtt gac ttc aga agc ttt gct gtt tgg tgt | 432 |
| His Tyr Leu Gln Lys Thr Val Asp Phe Arg Ser Phe Ala Val Trp Cys | |
| 130 135 140 | |
| gga gac atg aac gtt gct cct gag cca atc gac gtt cac tcc cca gac | 480 |
| Gly Asp Met Asn Val Ala Pro Glu Pro Ile Asp Val His Ser Pro Asp | |
| 145 150 155 160 | |
| aag ctg aag aac cac gtc tgc ttc cac gag gat gcg aga agg gca tac | 528 |
| Lys Leu Lys Asn His Val Cys Phe His Glu Asp Ala Arg Arg Ala Tyr | |
| 165 170 175 | |
| aaa aaa ata ctc gaa ctc ggc ttt gtt gac gtg ctg aga aaa ata cat | 576 |
| Lys Lys Ile Leu Glu Leu Gly Phe Val Asp Val Leu Arg Lys Ile His | |
| 180 185 190 | |
| ccc aac gag aga att tac acc ttc tac gac tac agg gtt aag gga gcc | 624 |
| Pro Asn Glu Arg Ile Tyr Thr Phe Tyr Asp Tyr Arg Val Lys Gly Ala | |
| 195 200 205 | |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| att | gag | cgg | ggg | ctg | gga | tgg | agg | gtt | gat | gcc | atc | ctc | gcc | acc | cca | 672 |
| Ile | Glu | Arg | Gly | Leu | Gly | Trp | Arg | Val | Asp | Ala | Ile | Leu | Ala | Thr | Pro | |
| | 210 | | | | | 215 | | | | | 220 | | | | | |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ccc | ctc | gcc | gaa | aga | tgc | gtg | gac | tgc | tac | gca | gac | atc | aaa | ccg | agg | 720 |
| Pro | Leu | Ala | Glu | Arg | Cys | Val | Asp | Cys | Tyr | Ala | Asp | Ile | Lys | Pro | Arg | |
| | 225 | | | | 230 | | | | | 235 | | | | | 240 | |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ctg | gca | gaa | aag | cca | tcc | gac | cac | ctc | cct | ctc | gtt | gct | gtg | ttt | gac | 768 |
| Leu | Ala | Glu | Lys | Pro | Ser | Asp | His | Leu | Pro | Leu | Val | Ala | Val | Phe | Asp | |
| | | | | 245 | | | | | 250 | | | | | 255 | | |

| | | | | | | | | | | | | | | | | |
|-----|-----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|-----|
| gtg | tag | | | | | | | | | | | | | | | 774 |
| Val | | | | | | | | | | | | | | | | |